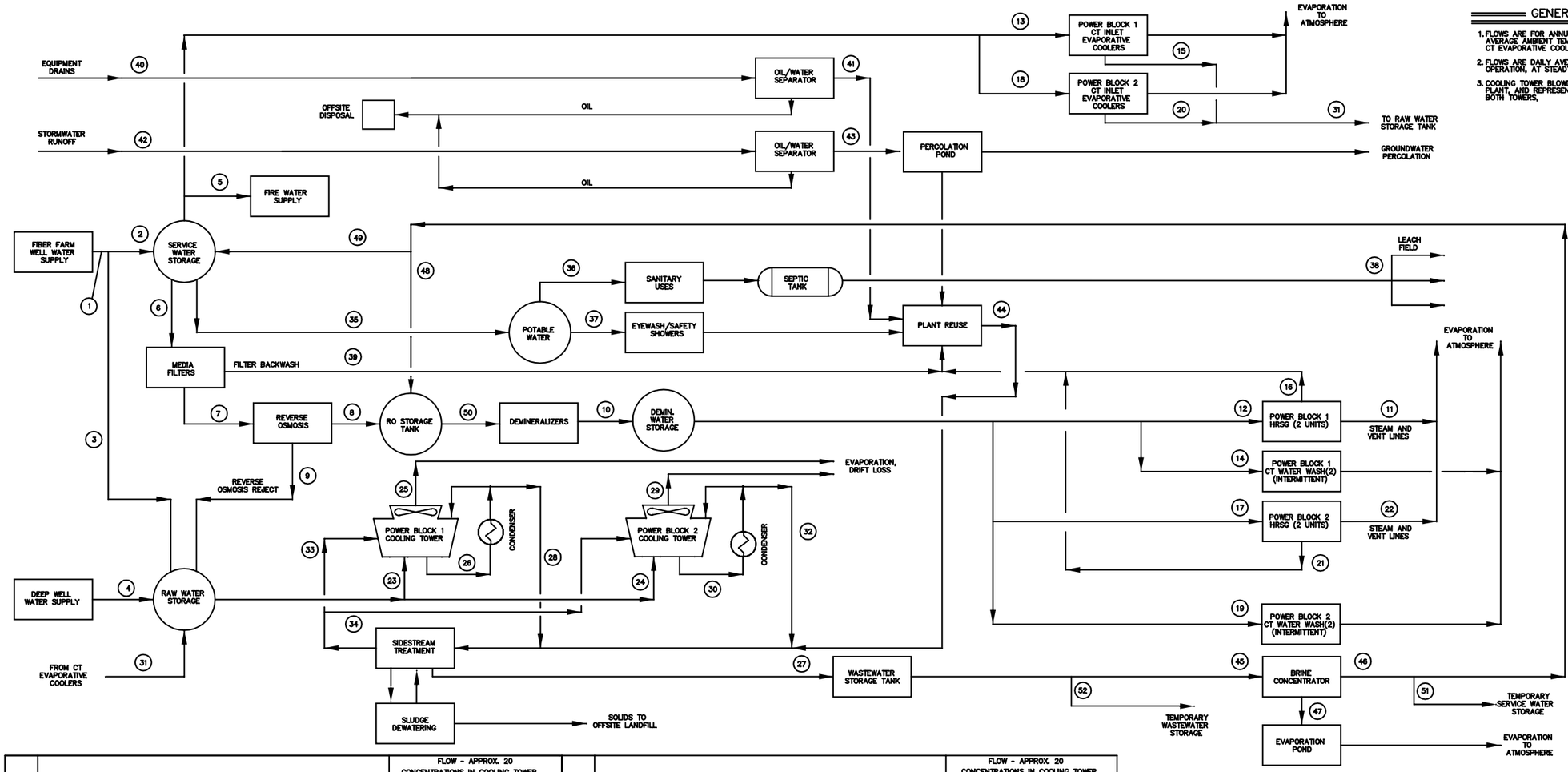

STREAM #	DESCRIPTION	FLOW - APPROX. 20 CONCENTRATIONS IN COOLING TOWER		STREAM #	DESCRIPTION	FLOW - APPROX. 20 CONCENTRATIONS IN COOLING TOWER	
		gallons/day	gpm			gallons/day	gpm
1	FIBER FARM RAW WATER SUPPLY	2,026	2,917,440	27	POWER BLOCKS 1&2 - COOLING TOWER BLOWDOWN (TOTAL)	160	230,400
2	SERVICE WATER STORAGE TANK MAKEUP	0	0	28	POWER BLOCK 1 - COOLING TOWER SIDE STREAM	1,330	1,915,200
3	RAW WATER STORAGE TANK MAKEUP	2,026	2,917,440	29	POWER BLOCK 2 - COOLING TOWER EVAPORATION, DRIFT	1,527	2,198,880
4	DEEP WELL RAW WATER SUPPLY	1,162	1,673,280	30	POWER BLOCK 2 - CIRCULATING WATER	167,646	
5	FIRE WATER SUPPLY	0	0	31	EVAPORATIVE COOLER BLOWDOWN (TOTAL)	26	37,440
6	MEDIA FILTER INLET	0	0	32	POWER BLOCK 2 - COOLING TOWER SIDESTREAM	1,330	1,915,200
7	RO SYSTEM INLET	0	0	33	SIDESTREAM TREATMENT SYSTEM PRODUCT - 1	1,250	1,800,000
8	RO PRODUCT	0	0	34	SIDESTREAM TREATMENT SYSTEM PRODUCT - 2	1,250	1,800,000
9	RO REJECT	0	0	35	POTABLE WATER SUPPLY	1	1,440
10	DEMINERALIZER PRODUCT WATER TO STORAGE	70	100,800	36	SANITARY WATER SUPPLY	1	1,440
11	POWER BLOCK 1 - STEAM VENT LOSSES	11	15,840	37	POTABLE WATER - CHEMICAL AREAS	INTERMITTENT	
12	POWER BLOCK 1 - HRSG MAKEUP	33	47,520	38	SANITARY WASTE	1	1,440
13	POWER BLOCK 1 - CT EVAPORATIVE COOLER MAKEUP	26	37,440	39	MEDIA FILTER BACKWASH	0	0
14	POWER BLOCK 1 CT WATER WASH	2	2,880	40	PLANT WASHDOWN, EQUIPMENT DRAINS	25	36,000
15	POWER BLOCK 1 - CT EVAPORATIVE COOLER BLOWDOWN	13	18,720	41	OIL/WATER SEPARATOR EFFLUENT	25	36,000
16	POWER BLOCK 1 - HRSG BLOWDOWN	22	31,680	42	STORMWATER	INTERMITTENT	
17	POWER BLOCK 2 - HRSG MAKEUP	33	47,520	43	STORMWATER	INTERMITTENT	
18	POWER BLOCK 2 - CT EVAPORATIVE COOLER MAKEUP	26	37,440	44	PLANT REUSE	INTERMITTENT	
19	POWER BLOCK 2 - CT WATER WASH	2	2,880	45	BRINE CONCENTRATOR FEED	160	230,400
20	POWER BLOCK 2 - CT EVAPORATIVE COOLER BLOWDOWN	13	18,720	46	BRINE CONCENTRATOR DISTILLATE	142	204,480
21	POWER BLOCK 2 - HRSG BLOWDOWN	22	31,680	47	BRINE CONCENTRATOR WASTE	18	25,920
22	POWER BLOCK 2 - STEAM, VENT LOSSES	11	15,840	48	DISTILLATE TO DEMINERALIZER SYSTEM	70	100,800
23	POWER BLOCK 1 - COOLING TOWER MAKEUP	1,607	2,314,080	49	RECYCLED DISTILLATE/PLANT WATER MAKEUP	53	76,320
24	POWER BLOCK 2 - COOLING TOWER MAKEUP	1,607	2,314,080	50	DEMINERALIZER SYSTEM FEED	70	100,800
25	POWER BLOCK 1 - COOLING TOWER EVAPORATION, DRIFT	1,527	2,198,880	51	BRINE CONCENTRATOR DISTILLATE (INTERMITTENT)	19	27,360
26	POWER BLOCK 1 - CIRCULATING WATER	167,646		52	BRINE CONCENTRATOR FEED (INTERMITTENT)	0	0

UTILITY ENGINEERING

Figure 2.5.3-1

Water Balance - Annual Average Day

Wallula Power Project